

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/087,020	BUESING ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Merilyn P Nguyen	2161	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/12/2004.
2. ☒ The allowed claim(s) is/are 1-4 and 7-18, now renumbered 1-16.
3. ☒ The drawings filed on 28 February 2002 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

***DETAILED ACTION***

1. In response to the communication dated 10/12/2004, claims 1-4 and 7-18 are active in this application as a result of the cancellation of claims 5-6 and 19-20, and in the condition for allowance. The reasons for allowance are stated in the previous Office Action mailed July 15, 2004 and also reiterated herein below for convenience.

***Acknowledges***

2. Receipt is acknowledged of the following items from the Applicant:
- The applicant's amendments have been considered.

**Allowable subject matter**

3. The following is an examiner's statement of reason for allowance:

None of the references of record teaches or suggests the claimed (Claim 7) invention having, in addition to the other limitations in the claims, a document management system interface including a dynamic document description for definition of virtual and/or extended attributes and a first search engine; and a content management system couple to the document management interface, wherein the content management system including a static document description and a second search engine.

None of the references of record teaches or suggests the claimed (Claims 1 and 15) invention having, in addition to the other limitations in the claims, the method of handling attributes in a document management system. Specifically, Claims 1 and 15 claim an invention with "real attributes" in the child index class as "virtual attributes" in the parent index class, such

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that these attributes in the parent index class do not exist physically, but only virtually. This is neither taught, nor suggested in the prior art.

None of the references of record teaches or suggests the claimed (Claims 4 and 18) invention having, in addition to the other limitations in the claims, the steps of obtaining.

The closest prior art of record, Bhargava et al. U.S Patent No. 5,752,017, also under the same assignee with the instant application, is directed to executing complex sql queries using projection operations that allow a choice in selection of virtual attributes from a source expression (Col. 2, lines 26-37). Bhargava discloses real attributes and virtual attributes which are used for mapping, wherein the real attributes available for manipulation to the user of the RDBMS and the virtual attributes used by the RDBMS for bookkeeping only. The real attributes are accessible to users and can be referenced externally in user queries. On the other hand, virtual attributes are not accessible to users and used to provide conceptional mapping (Col. 5, lines 22-40). However, Bhargava does not disclose child index class contains real attributes and parent index class contains the real attributes as virtual attributes.

Watkins U.S Patent No. 6,457,017 is directed to storing attribute of the managed files into databases. The stored attributes can include an ordered sequence between a plurality of sibling files (See col. 1, lines 44-59). Watkins discloses an indexer for maintaining an index of all managed file (col. 1, lines 59-61). The folder class having attributes and there is relationship between parent and child folders (Figs. 10 and 11, and col. 10, lines 14-34). However, there are no parent index class contains the real attributes as virtual attributes.

Sedlar U.S Patent No. 6,549,916 is directed to managing files in a computer system, wherein file classes are organized into a class hierarchy (See Fig. 16). File classes having plurality of attributes wherein child class inherent all the attributes of its parent class. However, there are no parent index class contains the real attributes as virtual attributes.

Therefore, none of the references of record, alone or combined, teaches or suggests the claimed limitations as addressed above.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance".

### ***Conclusion***

5. A shortened statutory period for response to this action is set to expire 3 (three) months and 0 (zero) day from the day of this letter. Failure to respond within the period for response will cause the application to become abandoned (see M.P.E.P 710.02(b)).

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Barer U.S Patent No. 6,839,701 discloses hitmask for querying hierarchically related content entities.

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Kavanagh U.S Patent No. 5,838,965 discloses object oriented database management system.

Mangat U.S Patent No. 6,049,799 discloses document link management using directory services.

Bhargava U.S Patent No. 6,088,691 discloses enumerating projection in sql queries containing outer and full outer joins in the presence of inner joins.


Baer U.S Patent No. 6,449,627 discloses volume management method and system for a compilation of content.

Watkins U.S Patent No. 6,457,017 discloses computing system for information management.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Merilyn P Nguyen whose telephone number is 571-272-4026. The examiner can normally be reached on M-F: 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

  
MN  
January 26, 2005

  
**FRANTZ COBY**  
**PRIMARY EXAMINER**